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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,360	08/21/2003	Robert Winston Nowlin	10205.042	7470

7590 03/31/2006

Paul F. Wille
6407 East Clinton St.
Scottsdale, AZ 85254

EXAMINER	
HAROON, ADEEL	
ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/645,360	NOWLIN ET AL.	
	Examiner	Art Unit	
	Adeel Haroon	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. This Office Action is in response to Amendment filed on date: 2/13/06. Claims 1-10 are still pending.

Response to Arguments

2. Applicant's arguments filed 2/13/06 have been fully considered but they are not persuasive.

Applicant argues that Uchino et al. does not disclose the preamble of claim 6 (Remarks page 5). In response to applicant's arguments, the recitation of cellular telephone has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Since the body of claim 6 does not refer back to cellular telephone listed in the preamble.

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchino et al. (U.S. 2003/0063662).

With respect to claim 6, Uchino et al. discloses a device having a receive channel and a transmit channel in figure 1. Uchino et al. disclose a plurality of analysis sub-band filters band (Paragraph 452). Uchino et al. discloses a comfort noise generator including a white noise generator, element number 25 (Paragraph 114). Uchino et al. also discloses coupling the white noise signal through a first and second multipliers, element number 55, to the low pass and high pass input of a QMF bank respectively in figures 23 and 24 (Paragraphs 456-457, 472). Uchino et al. further discloses controlling the gain of the multipliers, element number 54, with the magnitude of the sub-band analysis (Paragraphs 456-457). Uchino et al. further discloses means for selectively coupling the comfort noise to the channel (Paragraphs 115-147).

With respect to claim 7, Uchino et al. further discloses n sub-bands with no more than (n-1) QMF banks, element number 57, that are upwardly cascaded in figure 27 (Paragraph 472).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchino et al (U.S. 2003/006362) in view of Swaminathan et al. (U.S. 5,630,016).

With respect to claim 1, Uchino et al. disclose a method for providing a comfort noise signal. Uchino et al. discloses generating a white noise signal (Paragraph 114). Uchino et al. also disclose applying the white noise to a QMF filter bank, element number 56, to produce a comfort noise signal (Paragraph 472), wherein the magnitude of the white noise into each QMF filter is controlled in accordance with the magnitude of the signal in a corresponding sub-band in the one channel (Paragraph 457). Uchino et al. further disclose selectively coupling the comfort noise to the channel (Paragraphs 115-147). Uchino et al. uses this method in a digital communication system but does

not expressly disclose a telephone. However, Swaminathan et al. teach a comfort noise generation method for digital communication system including telephones (Column 1, lines 14-19). Therefore, it would be obvious to one of ordinary skill in the art at the time of the applicant's invention to apply Uchino et al.'s method in a telephone as taught by Swaminathan et al. in order "to provide background noise for discontinuous transmission and receiving systems during periods of voice inactivity that has the attributes of background noise during periods of voice activity" (Column 2, lines 14-19).

With respect to claim 2, Uchino et al. also discloses coupling a white noise signal through a first and second multipliers, element number 55, to the low pass and high pass input of a QMF bank respectively in figures 23 and 24 (Paragraphs 456-457, 472). Uchino et al. further discloses controlling the gain of the multipliers, element number 54, with the magnitude of the sub-band analysis where the first sub-band has a lower frequency than the second sub-band (Paragraphs 456-457).

With respect to claim 3, Uchino et al. does not expressly disclose combining the output signals from two or more of the sub-band filters. However, this combination results only in a wider bandwidth sub-band filter, which controls the multiplier's magnitude. Since Uchino et al. teaches that the bandwidth of the sub-band filters as a range (Paragraph 442), it would be obvious to one of ordinary skill in the art at the time of the applicant's invention, to combine the outputs of the sub-band filters resulting in a wider bandwidth sub-band filter in order to have a wider bandwidth for the sub-band filter.

With respect to claims 4 and 5, Uchino et al. further discloses n sub-bands with no more than (n-1) QMF banks, element number 57, that are upwardly cascaded to increase the low frequency resolution of the comfort noise in figure 27 (Paragraph 472).

7. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchino et al. (U.S. 2003/0063662).

With respect to claim 8, Uchino et al.'s method is described above in the discussion of claim 6. Uchino et al. does not expressly disclose combining the output signals from two or more of the sub-band filters. However, this combination results only in a wider bandwidth sub-band filter, which controls the multiplier's magnitude. Since Uchino et al. teaches that the bandwidth of the sub-band filters as a range (Paragraph 442), it would be obvious to one of ordinary skill in the art at the time of the applicant's invention, to combine the outputs of the sub-band filters resulting in a wider bandwidth sub-band filter in order to have a wider bandwidth for the sub-band filter.

With respect to claim 9, Uchino et al. further discloses n sub-bands with no more than (n-1) QMF banks, element number 57, that are upwardly cascaded in figure 27 (Paragraph 472).

With respect to claim 10, Uchino et al. does not expressly disclose the number of the QMF banks is (n/2 –1). However, since the summation of the sub-bands filters only resulted in a wider sub-band filter, the combination is treated as one sub-band filter.

Therefore, the expression (n/2-1) is interpreted as one less QMF bank than the number of sub-band filter, which Uchino et al. teaches in figure 27 (Paragraph 472).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adeel Haroon whose telephone number is (571) 272-7405. The examiner can normally be reached on Monday thru Friday, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AH
3/21/06

Nguyen Vo
3/29/2006

NGUYEN T. VO
PRIMARY EXAMINER